



NEWS RELEASE
 CSE:NF
 November 9, 2023

High-Grade Uranium Encountered in Nuclear Fuels' First Drill Program

Vancouver, British Columbia, November 9, 2023 – Nuclear Fuels Inc. (CSE:NF) (“Nuclear Fuels” or the “Company”) announced today initial results from the first 12 holes of its drill program designed to confirm and expand the historic resource at its Kaycee Uranium Project in Wyoming’s Powder River Basin. 5 holes contain high-grade uranium mineralization suitable for In-Situ Recovery (“ISR”) extraction technology. ISR technology extracts uranium in a non-invasive process through the use of natural groundwater and oxygen, coupled with a proven ion exchange process, to recover the uranium.

Highlights:

- High-grade mineralization was encountered in 5 holes with Grade Thickness (GT) ranging from 0.441 to 0.908. The highest grade intercept being 3.0 feet of 0.240% eU₃O₈;
- Five holes have Grade Thickness (GT) of over 0.3 which is considered an economic minimum for inclusion in a typical wellfield in the Power River Basin;
- Grade thickness (GT) is defined as Grade x Thickness of a mineralized intercept;
- Phase 1 drilling is focused on the Saddle Zone which hosts a historic resource. Drilling is focused on confirming and expanding historic resources in the lower Wasatch Formation which occur at shallow depths ranging from approximately 220 to 350 feet in saturated sands;
- Drilling continues with additional results expected in November 2023.

To view Kaycee Uranium Project maps please visit: <https://bit.ly/3QLS327>

Michael Collins, Chief Executive Officer, stated: “Our initial results from the Saddle Zone at the Kaycee Uranium project are exceeding our expectations. We continue to make steady advances with more than 1,000 feet drilled on an average day and look forward to continued results. With over 100 miles of historically defined roll fronts, drilling continues with results following quickly due to the on-site eU₃O₈ gamma probe logging.”

Table of Significant Results

Hole No	Depth (ft)	Thickness (ft)	Grade % (U ₃ O ₈)	GT
SD23-001	249.0	4.0	0.114	0.456
SD23-006	241.0	2.0	0.066	0.132
SD23-007	255.0	2.5	0.029	0.073
SD23-008A	273.5	2.5	0.050	0.125
and	282.0	2.0	0.053	0.106
and	294.5	7.0	0.097	0.679
SD23-009	331.5	4.0	0.227	0.908

SD23-010	306.5	2.0	0.039	0.078
and	331.5	4.0	0.212	0.848
SD23-012	286.5	4.5	0.163	0.734
and	293.5	2.5	0.062	0.186
and	314.5	2.5	0.043	0.108

Drill holes are reported that returned significant zones of uranium mineralization with >2 ft thickness at or above a grade cut-off of 0.02 per cent eU₃O₈. Bold type represents potentially ISR recoverable uranium with a Grade Thickness of >0.3 which is considered suitable for inclusion in a wellfield. ⁽¹⁾ % eU₃O₈ is a measure of gamma intensity from a decay product of uranium and is not a direct measurement of uranium. Numerous comparisons of eU₃O₈ and chemical assays of Powder River Basin core samples indicate that eU₃O₈ is a reasonable indicator of the actual uranium assay.

Kaycee Uranium Project, Wyoming

The Kaycee Project in Wyoming's Powder River Basin ("PRB") is Nuclear Fuel's priority project consisting of over 42 square miles of mineral rights over a 33-mile mineralized trend and 110 miles of identified roll fronts. The Kaycee Project is believed to be the only project in the PRB where all three known historically productive sandstone formations (Wasatch, Fort Union, and Lance) are mineralized and potentially accessible for ISR extraction. The Kaycee Project, under Nuclear Fuels, represents the first time since the early 1980's that the entire district is controlled by one company.

Nuclear Fuels acquired the Kaycee Project from enCore Energy Corp., which retains a back-in right for 51% of the project by paying 2.5X the exploration costs and carrying the Kaycee project to production (costs recoverable from production) upon Nuclear Fuels establishing a minimum 15 million pounds U₃O₈ 43-101 compliant resource.

Wyoming is a proven and prolific uranium producer with a pro-energy government and established regulatory regime for the permitting and extraction of uranium through ISR technology. As Wyoming is one of the few "Agreement States" where the federal government and the Nuclear Regulatory Commission have ceded regulatory authority to the state government, permitting and advancing uranium projects is more efficient and streamlined as compared to most other states. Wyoming, with over 250 million pounds of historic production, ranks as the state with the second most uranium production to date; most of which has been through the ISR method since 1990; predominantly from the PRB.

The technical content of this news release has been reviewed and approved by Mark Travis, CPG., a contractor to the Company, and a Qualified Person as defined in National Instrument 43-101.

About Nuclear Fuels Inc.

Nuclear Fuels Inc. (CSE:NFI) is committed to aggressive exploration of district-scale In-Situ Recovery ("ISR") uranium projects in proven and prolific jurisdictions. Focused on its priority Kaycee Project, located in Wyoming's Powder River Basin, our goal is to advance the project onto a path to production. enCore Energy Corp. maintains the right to back-in to 51% ownership by paying the Company 2.5X its exploration expenditures and carrying the project to production (recoverable from production). With existing historic resources through a 33-mile trend, 110+ miles of mapped roll-fronts and 3,800 drill holes, Nuclear Fuels has secured the district under one company's control for the first time since the early 1980's. Nuclear Fuels also provides a unique model for development of our other uranium projects and has established a pipeline of future opportunities in known uranium jurisdictions. Our industry leaders work to build America's uranium resources and provide a domestic fuel for nuclear energy; always on, always available.

ISR technology extracts uranium in a non-invasive process through the use of groundwater and oxygen, coupled with a proven ion exchange process, to recover the uranium.

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The Canadian Securities Exchange has not reviewed this press release and does not accept responsibility for the adequacy or accuracy of this news release.

Certain information in this news release constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as “may”, “should”, “anticipate”, “expect”, “potential”, “believe”, “intend” or the negative of these terms and similar expressions. Forward-looking statements in this news release include, but are not limited to, statements relating to planned exploration programs and the results of additional exploration work in seeking to establish mineral resources as defined in NI43-101 on any of our properties. Forward-looking statements necessarily involve known and unknown risks, including, without limitation, risks associated with the completing planned exploration programs and the results of those programs; the ability to access additional capital to fund planned and future operations; regulatory risks including exploration permitting; risks associated with title to our mineral projects; the ability of the company to implement its business strategies; and other risks including risks contained in documents available for review at www.sedar.com under the Company’s profile. Readers are cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement.